

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of:

Hideo FURUKAWA

Serial Number: NEW

Filed: November 20, 2001

For: EMULSION PRODUCING APPARATUS

PRELIMINARY AMENDMENT

Honorable Commissioner
of Patents and Trademarks
Washington, D.C. 20231

November 19, 2001

Dear Sir:

Prior to an examination on the merits, please amend the above-identified application as follows:

IN THE CLAIMS:

Please amend the following Claims 5 and 7-12 to read as follows:

-- 5. (Amended) The emulsion producing apparatus according to Claim 1, wherein the mixing means mixes the plurality of liquids and a surfactant substantially uniformly. --

-- 7. (Amended) The emulsion producing apparatus according to Claim 1, wherein the pressure rising pump is driven by an electric motor whose rotational speed can be changed. --

-- 8. (Amended) The emulsion producing apparatus according to Claim 1, wherein the pressure rising pump is driven by an engine utilizing the mixture solution brought into the emulsified state by the emulsifying means as a fuel. --

-- 9. (Amended) The emulsion producing apparatus according to Claim 1, wherein the pressure rising pump is of a variable delivery type. --

-- 10. (Amended) The emulsion producing apparatus according to Claim 1, wherein a pre-pressurizing pump for pressurizing the mixture solution produced by the mixing means and sending it to the pressure rising pump is provided on an upstream side of the pressure rising pump. --

-- 11. (Amended) The emulsion producing apparatus according to Claim 1, wherein the emulsifying means includes a cylindrical main body; wherein inside of the main body is aligned with spacers for maintaining constant intervals between the partition walls and/or an interval between the partition wall and one end of the main body; wherein the spacers are aligned alternately along with the partition walls along a longitudinal direction of the main body; and wherein the partition walls and the spacers are urged in one direction along the longitudinal direction of the main body to press to the main body by a spring arranged in the main body. --

-- 12. (Amended) The emulsion producing apparatus according to Claim 1, wherein the plurality of liquids are two kinds of liquids of water and the fuel. --

Please add the following new claims:

-- 13. The emulsion producing apparatus according to Claim 2, wherein the pressure rising pump is driven by an electric motor whose rotational speed can be changed. --

-- 14. The emulsion producing apparatus according to Claim 3, wherein the pressure rising pump is driven by an electric motor whose rotational speed can be changed. --

-- 15. The emulsion producing apparatus according to Claim 2, wherein the pressure rising pump is driven by an engine utilizing the mixture solution brought into the emulsified state by the emulsifying means as a fuel. --

-- 16. The emulsion producing apparatus according to Claim 3, wherein the pressure rising pump is driven by an engine utilizing the mixture solution brought into the emulsified state by the emulsifying means as a fuel. --

-- 17. The emulsion producing apparatus according to Claim 2,
wherein the pressure rising pump is of a variable delivery type. --

-- 18. The emulsion producing apparatus according to Claim 2,
wherein a pre-pressurizing pump for pressurizing the mixture solution
produced by the mixing means and sending it to the pressure rising pump is
provided on an upstream side of the pressure rising pump. --

-- 19. The emulsion producing apparatus according to Claim 2,
wherein the emulsifying means includes a cylindrical main body;
wherein inside of the main body is aligned with spacers for maintaining
constant intervals between the partition walls and/or an interval between the
partition wall and one end of the main body;
wherein the spacers are aligned alternately along with the partition
walls along a longitudinal direction of the main body; and
wherein the partition walls and the spacers are urged in one direction
along the longitudinal direction of the main body to press to the main body by
a spring arranged in the main body. --

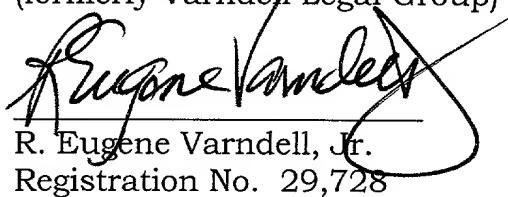
--20. The emulsion producing apparatus according to Claim 2, wherein
the plurality of liquids are two kinds of liquids of water and the fuel. --

REMARKS

In the foregoing amendments, Claims 5 and 7-12 were amended to remove multiple dependent claims, and Claims 13-20 were added. Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached pages are captioned "**VERSION WITH MARKINGS TO SHOW CHANGES MADE.**" Early consideration and allowance of Claims 1-20 are respectfully requested.

In the event any additional fees are due in connection with the filing of this application, it is respectfully requested that such fees be charged to our Deposit Account No. 22-0256.

Respectfully submitted,
VARNDELL & VARNDELL, PLLC
(formerly Varndell Legal Group)



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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Claims 5 and 7-12 were amended as follows:

-- 5. (Amended) The emulsion producing apparatus according to [any one of] Claim[s] 1 [through 3:]

wherein the mixing means mixes the plurality of liquids and a surfactant substantially uniformly. --

-- 7. (Amended) The emulsion producing apparatus according to [any one of] Claim[s] 1, [2, 3, 4 and 6 :]

wherein the pressure rising pump is driven by an electric motor whose rotational speed can be changed. --

-- 8. (Amended) The emulsion producing apparatus according to [any one of] Claim[s] 1, [2, 3, 4 and 6 :]

wherein the pressure rising pump is driven by an engine utilizing the mixture solution brought into the emulsified state by the emulsifying means as a fuel. --

-- 9. (Amended) The emulsion producing apparatus according to [any one of] Claim[s] 1, [2, 3, 4 and 6 :]

wherein the pressure rising pump is of a variable delivery type. --

-- 10. (Amended) The emulsion producing apparatus according to [any one of] Claim[s] 1, [2, 3, 4 and 6 :]

wherein a pre-pressurizing pump for pressurizing the mixture solution produced by the mixing means and sending it to the pressure rising pump is provided on an upstream side of the pressure rising pump. --

-- 11. (Amended) The emulsion producing apparatus according to [any one of] Claim[s] 1, [2, 3, 4 and 6 :]

wherein the emulsifying means includes a cylindrical main body;

wherein inside of the main body is aligned with spacers for maintaining constant intervals between the partition walls and/or an interval between the partition wall and one end of the main body;

wherein the spacers are aligned alternately along with the partition walls along a longitudinal direction of the main body; and

wherein the partition walls and the spacers are urged in one direction along the longitudinal direction of the main body to press to the main body by a spring arranged in the main body. --

-- 12. (Amended) The emulsion producing apparatus according to [any one of] Claim[s] 1, [2, 3, 4 and 6 :]

wherein the plurality of liquids are two kinds of liquids of water and the fuel. --